Please amend page 31, line 1 as follows:

## Claims What is claimed is:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Original) An optical imaging contrast agent with affinity for an abnormally expressed biological target associated with lung cancer.
- 2. (Currently Amended) A contrast agent as claimed in claim 1 wherein the with molecular weight is below 14 000 Daltons.
- 3. (Currently amended) A contrast agent as claimed in claim 1 or 2 of formula I V-L-R, (I)

wherein V is one or more vector moieties having affinity for an abnormally expressed target in lung cancer, L is a linker moiety or a bond and R is one ore more reporter moieties detectable in optical imaging.

- 4. (Currently amended) A contrast agent as claimed in any-of claims 1-to 3 claim 1 comprising a contrast agent substrate, wherein the target is an abnormally expressed enzyme, such that the contrast agent changes pharmacodynamic properties and/or pharmacokinetic properties upon a chemical modification from a contrast agent substrate to a contrast agent product upon a specific enzymatic transformation.
- 5. (Currently amended) A contrast agent as claimed in any of claims 1 to 4 claim 1 having affinity for any of the targets selected from galectin-3, cancer antigen 125 (CA125), cathepsin L, MUC1, caspase-9 and -3, cyclo-oxygenase-2 (COX-2), glutathione-S-transferase (GST), the angiopoietin receptors, integrin  $\alpha\nu\beta3$ , vascular endothelial growth factor receptor (VEGF), HER2/epidermal growth factor receptor (EGFR), MDR, urokinase plasminogen activator receptor and cyclin D1.
- 6. (Currently amended) A contrast agent as claimed in any of claims 3 to 5 claim 3 wherein V is selected from peptides, peptoid moieties, oligonucleotides, oligosaccharides, fat-related compounds and traditional organic drug-like small molecules.

- 7. (Currently amended) A contrast agent as claimed in any of claims 3-6 claim 3 wherein R is a dye that interacts with light in the wavelength region from the ultraviolet to the near-infrared part of the electromagnetic spectrum.
- 8. (Currently amended) A pharmaceutical composition for optical imaging of lung cancer comprising a contrast agent as defined in any of claims 1 to 7 claim 1 together with at least one pharmaceutically acceptable carrier or excipient.
- 9. (Currently amended) Use of a contrast agent as claimed in any of claims 1-to 7 claim 1 for the manufacture of a diagnostic agent for use in a method of optical imaging of lung cancer involving administration of said diagnostic agent to an animate subject and generation of an image of at least part of said subject.
- 10. (Currently amended) A method of optical imaging of lung cancer of an animate subject involving administering a contrast agent as defined in any of claims 1 to 7 claim 1 to the subject and generating an optical image of at least a part of the subject to which said contrast agent has distributed.
- 11. (Currently Amended) <u>The Mmethod as claimed in claim 10 wherein the optical imaging is for diagnosis of lung cancer, for follow up of the progress of lung cancer development, for follow up of treatment of lung cancer or for surgical guidance.</u>
- 12. (Currently amended) <u>The Use of a contrast agent as defined in any of claim 1 to 7 claim 1</u> wherein the contrast agent is used for optical imaging of lung cancer.
- 13. (Canceled) Use of a contrast agent as claimed in claim 12 for diagnosis of lung cancer, for follow up of the progress of lung cancer development, for follow up of treatment of lung cancer or for surgical guidance.